REMARKS

Reconsideration and the timely allowance of the pending claims, in view of the following remarks, are respectfully requested.

In the Office Action dated February 7, 2006, the Examiner rejected claims 1-3, under 35 U.S.C. §102(e), as allegedly being anticipated by Kamiguchi '534 (U.S. Patent No. 6,527,534); rejected claims 4-6, under 35 U.S.C. §103(a), as allegedly being unpatentable over Kamiguchi '534 in view of Ohno '658 (U.S. Patent No. 5,492,658); and provisionally rejected claims 1-3 and claims 4-6, under non-statutory double patenting, as allegedly being unpatentable over claims 3-4 and claims 1-2 and 5-6, respectively, of Matsubayashi '877 (U.S. Patent No. 6,669,877).

The Examiner also objected to claim 6 as allegedly containing certain informalities.

By this Amendment, claims 2-3 and 5-6 have been amended to provide a clearer presentation of the claimed subject matter and claims 1 and 4 have been cancelled without prejudice or disclaimer. As such, claims 2-3 and 5-6 remain pending in this application.

Applicants submit that no new matter has been introduced and that the claim changes to claim 6 correct the minor informalities contained therein. Accordingly, Applicant respectfully requests the immediate withdrawal of the objection to claim 6.

Applicants respectfully traverse the prior art rejections, under 35 U.S.C. §102(b) and §103(a) for the following reasons.

I. Prior Art Rejections

As noted above, independent claim 2 positively recites obtaining a pattern characterizing torque of an ejector-pin driving motor relative to time or a position of an ejector pin based on when a molded product is normally removed. This feature is amply supported by the embodiments disclosed in the Specification. (*See, e.g.,*

Originally-filed Specification: page 8, lines 3-8; FIGS. 2-4). For example, the described embodiments provide that when a molded product 1 is normally removed from the dies, a pattern showing the driving torque of the servo motor 15 with time is obtained and recorded as a reference pattern. Then, one or more monitoring zones are set on the reference pattern and the upper and lower limits of the driving torque in each monitoring zone are set. The monitoring zones and the upper and lower limits can then be inputted by the operator into the control system 20 of the injection-molding machine. (*See*, Originally-filed Specification: page 8, lines 3-15; FIGS. 2-4).

Unlike the present invention, none of the asserted references teach or suggest each and every element of claim 2, including the feature identified above. In particular, the Kamiguchi '534 reference is directed to a disturbance estimating observer, which estimates a load applied to a servomotor for driving an ejector axis. (*See*, Kamiguchi '534: Abstract, col. 2, lines 62-65). Kamiguchi '534 discloses that the disturbance estimating observer is assembled in or integrated with an ejector controller, in which the observer estimates a load applied to a servomotor during ejector operations. (*See*, Kamiguchi '534: col. 1, lines 28-34). The disturbance estimating observer is configured so that, ***for each molding cycle***, the observer detects a load during ejector operations, stores the load data for the latest ejector operation or multiple ejector operations, and computes an average load from the stored data. That is, for each for each molding cycle, the latest average load data is stored. (*See*, Kamiguchi '534: col. 2, lines 14-26; col. 7, lines 19-59; col. 8, lines 13-53). Armed with the computed average load, a reference load pattern is set along with permissible upper and lower limit values. In this manner, the Kamiguchi '534 system is capable of automatically calculating the reference load pattern and updating the molding cycle.

However, in so doing, Kamiguchi '534 fails to teach or suggest obtaining a pattern characterizing torque of an ejector-pin driving motor relative to time or a position of an ejector pin based on when a molded product is normally removed, as required by claim 2. That is, Kamiguchi '534 does not extract the torque characterizing

reference pattern based on when a molded product is normally removed -- rather it bases it on the latest average load data for each molding cycle.

Moreover, the remaining reference, Ohno '658, is incapable of curing the deficiencies of Kamiguchi '534, identified above. Ohno '658 has been cited to merely assert that functionally similar control parameters may be applied to electric and hydraulic machines. As such, Ohno '658 remains equally deficient in failing to teach or suggest obtaining a pattern characterizing torque of an ejector-pin driving motor relative to time or a position of an ejector pin based on when a molded product is normally removed, as required by claim 2 and does nothing to remedy the failings of Kamiguchi '534.

For at least these reasons, Applicants submit that the none of the asserted references teach or suggest the claimed combination of elements recited by amended claim 2. Accordingly, Applicants submit that claim 2 is patentable and request the immediate withdrawal of the prior art rejections of claim 2.

Moreover, because independent claims 3 and 5-6 recite features that are similar to the features identified above that are proven to be patentable, claims 3 and 5-6 are also patentable for at least the reasons presented with respect to claim 1.

II. Provisional Obviousness-Type Double Patenting

Regarding the provisional non-statutory double patenting rejections, Applicants still disagree with the Examiners' assertion that the claims 1-3 and claims 4-6 are not patentably distinct from claims 3-4 and claims 1-2 and 5-6 of Matsubayashi '877, respectively. Furthermore, by failing to provide reasons why the differences between claims 1-3 and claims 4-6 and claims 1-2 and 5-6 of Matsubayashi '877 would have been obvious to one of ordinary skill in the art, the Examiner has clearly not established a *prima facie* case of obviousness-type double patenting.

However, in an effort to advance the examination of the present application, Applicants submits herewith a Terminal Disclaimer in compliance with 37 C.F.R. §1.321(c) to overcome the provisional rejection. Accordingly, the provisional rejection of claims 1-3 and claims 4-6 has been rendered moot.

III. Conclusion.

All matters having been addressed and in view of the foregoing, Applicants respectfully request the entry of this Amendment, the Examiner's reconsideration of this application, and the immediate allowance of all pending claims.

Applicants' Counsel remains ready to assist the Examiner in any way to facilitate and expedite the prosecution of this matter. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the Undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975, under Order No. 008312-0305862.

The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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